



FIG.1

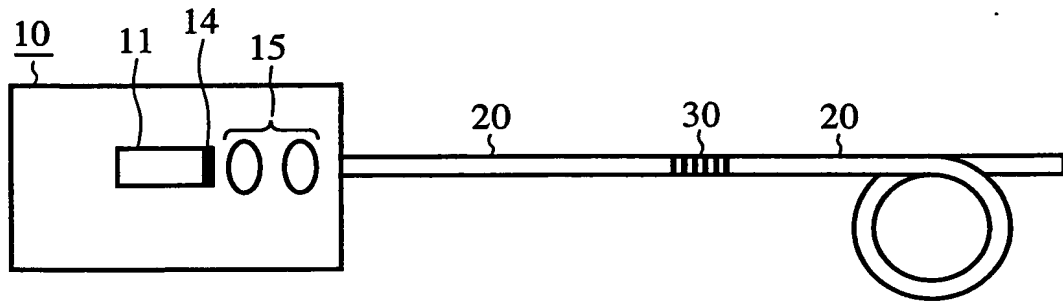


FIG.2

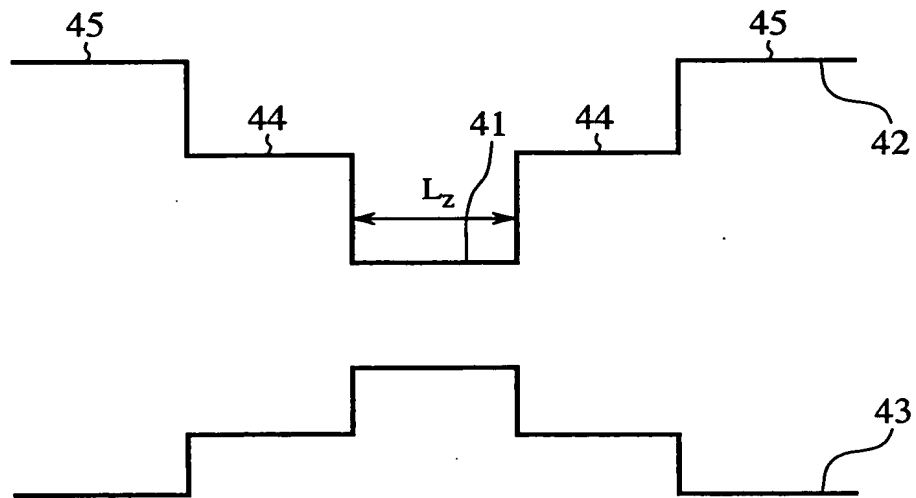




FIG.3(a)

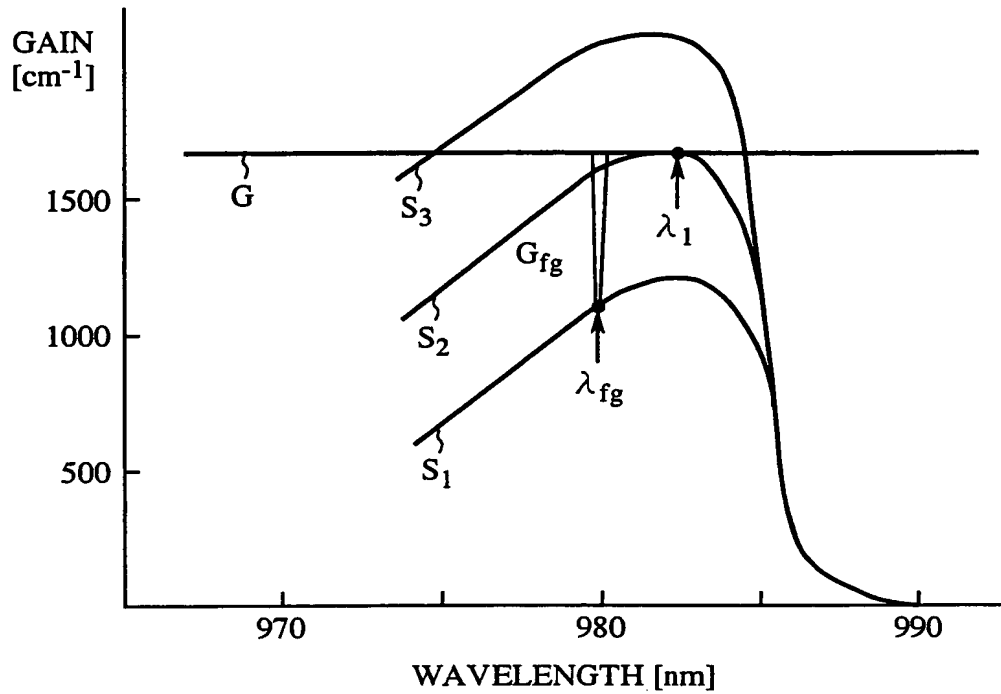


FIG.3(b)

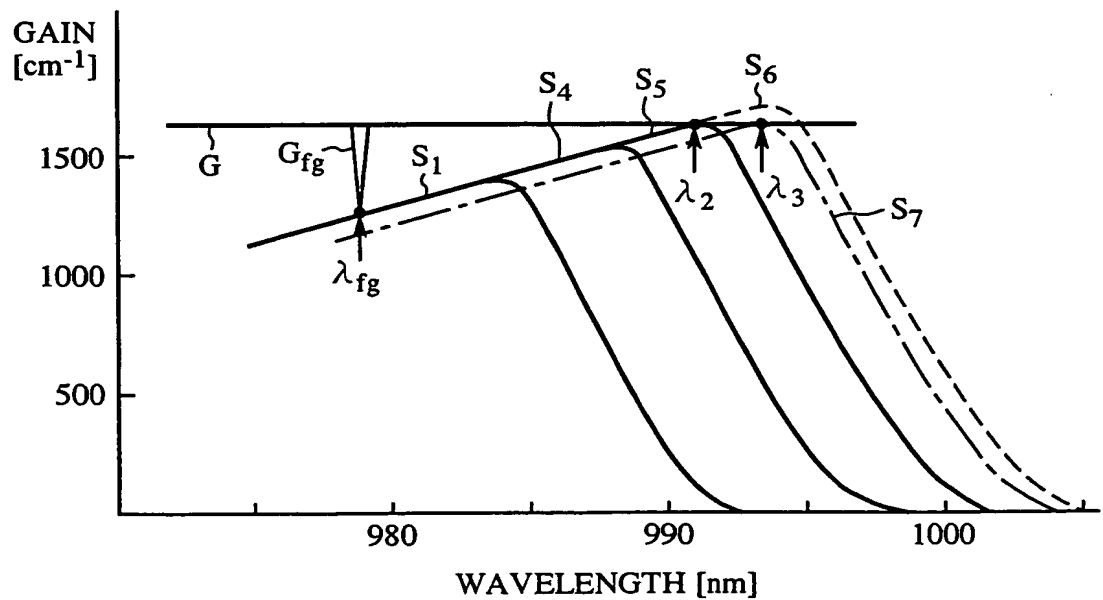




FIG.4(a)

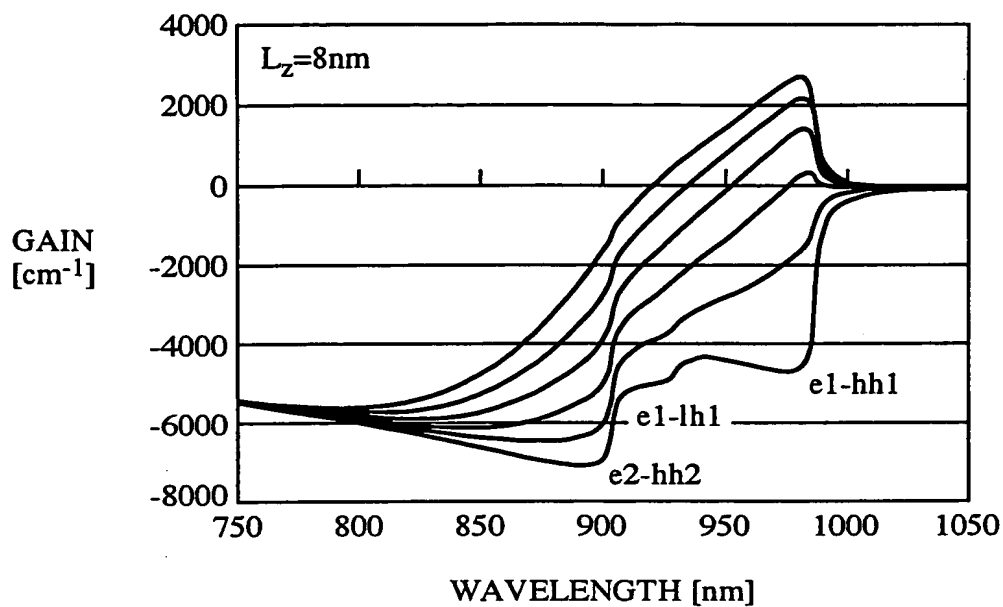


FIG.4(b)

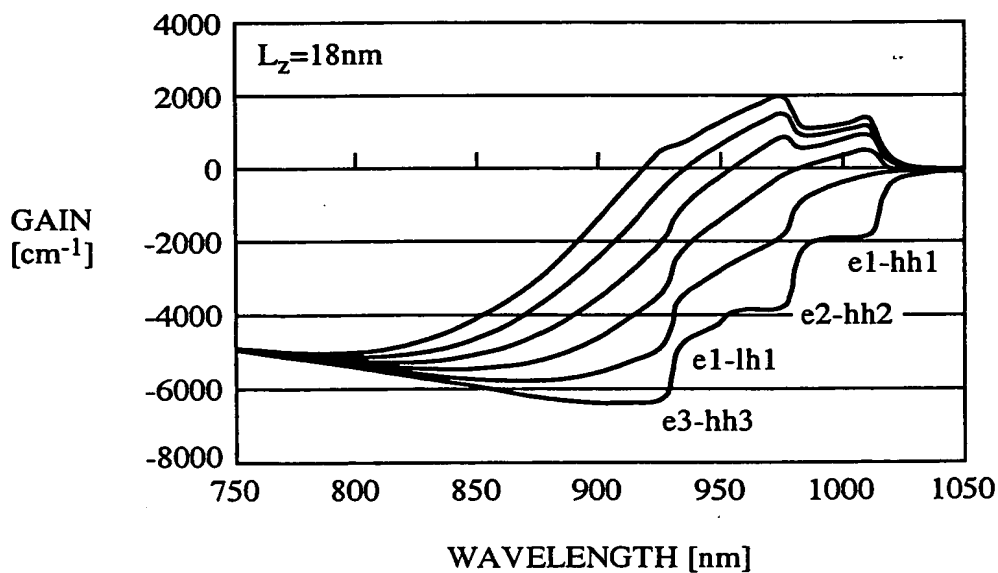




FIG.5

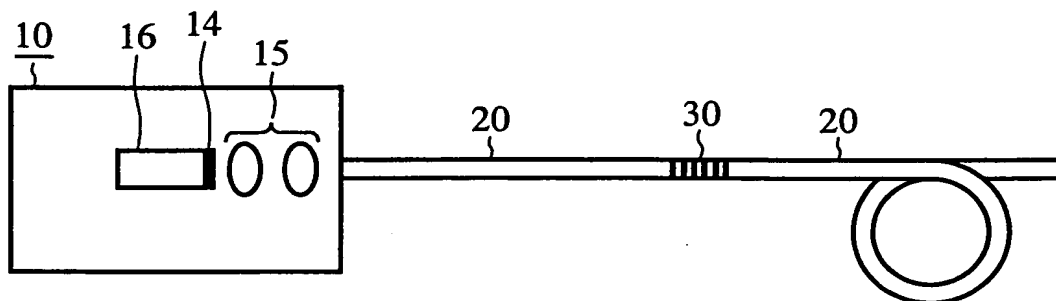


FIG.6

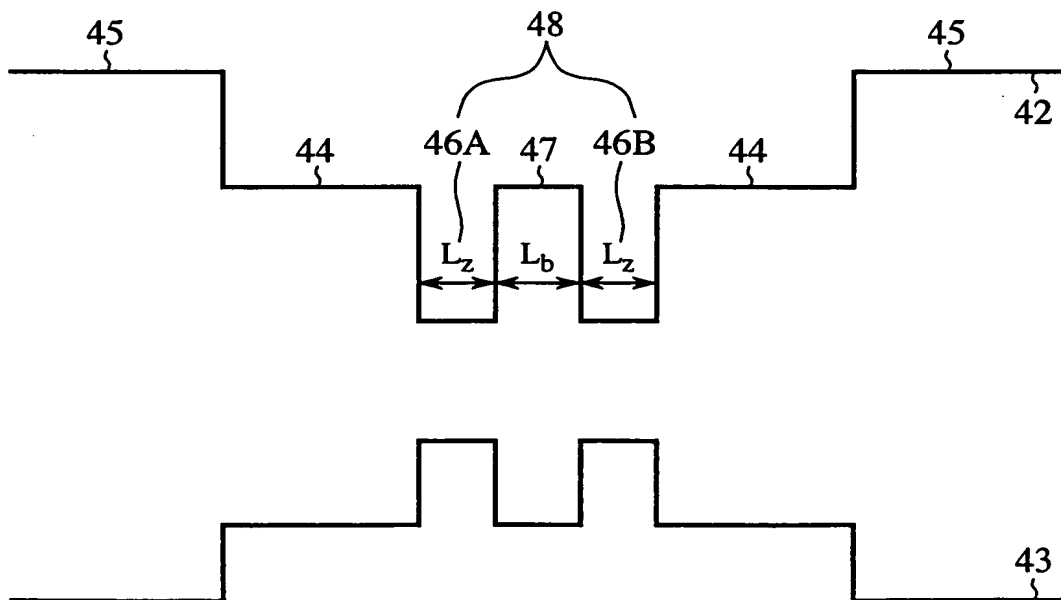




FIG.7(a)

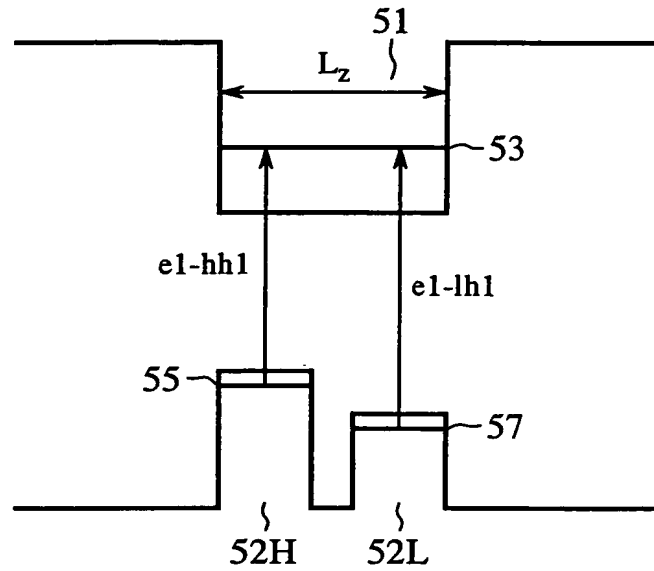


FIG.7(b)

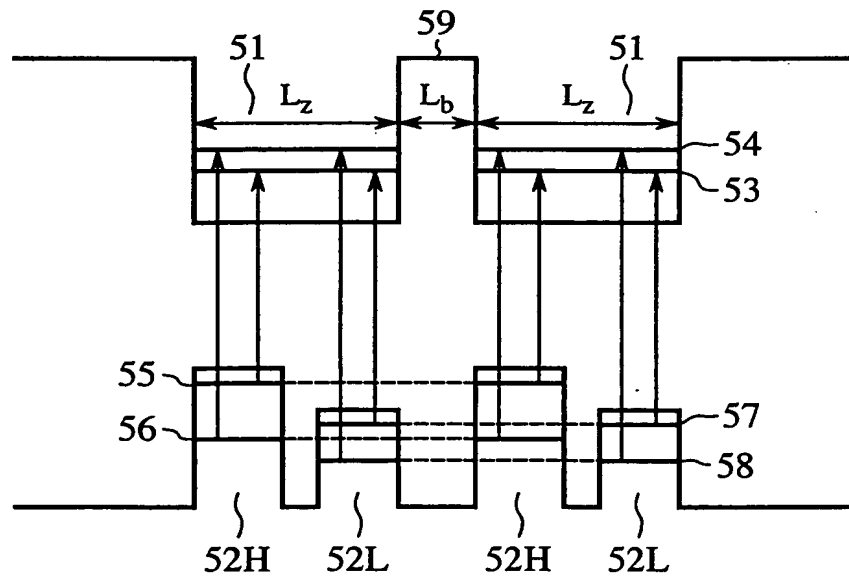


FIG. 8

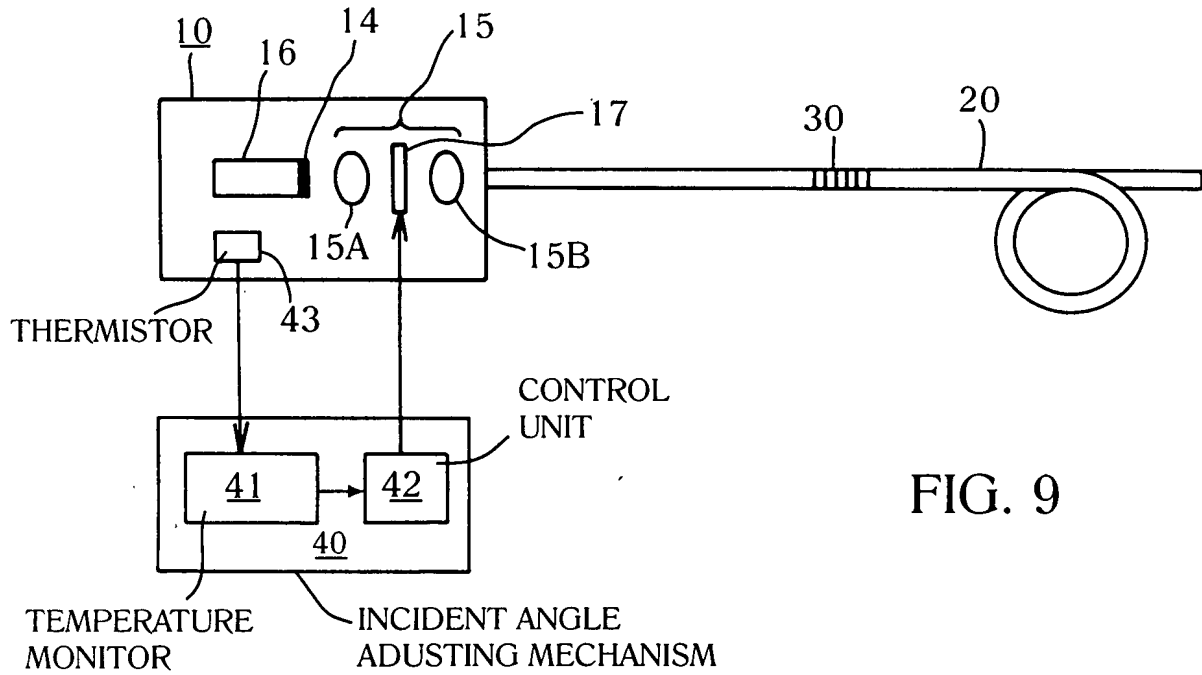
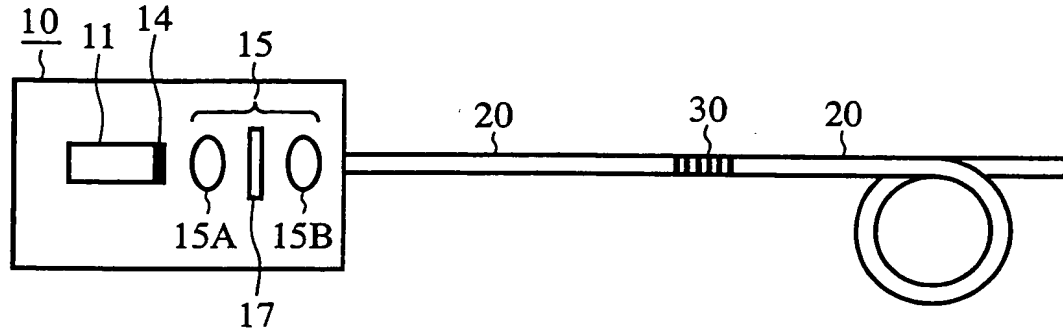


FIG. 9

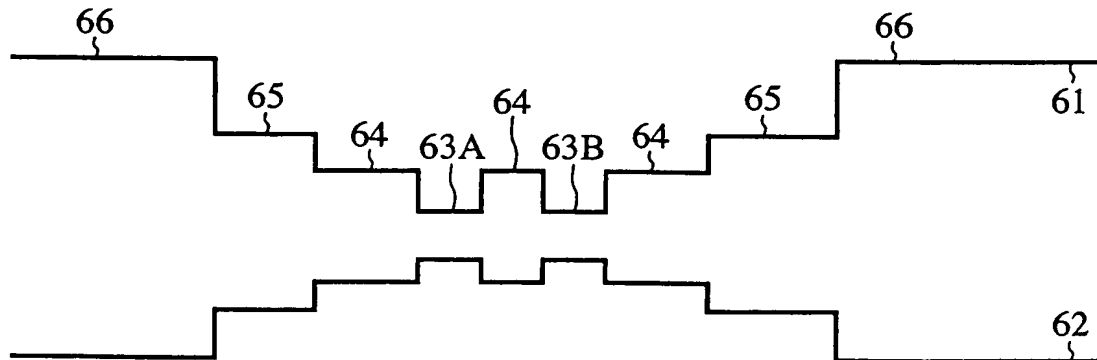


FIG. 10



FIG.11 (PRIOR ART)

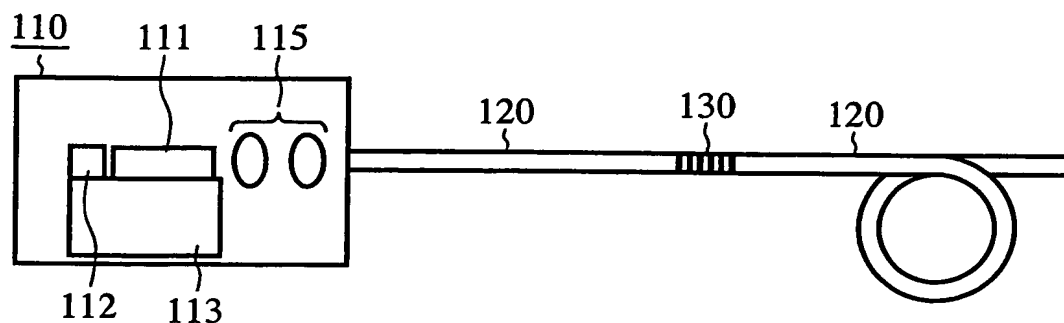


FIG.12 (PRIOR ART)

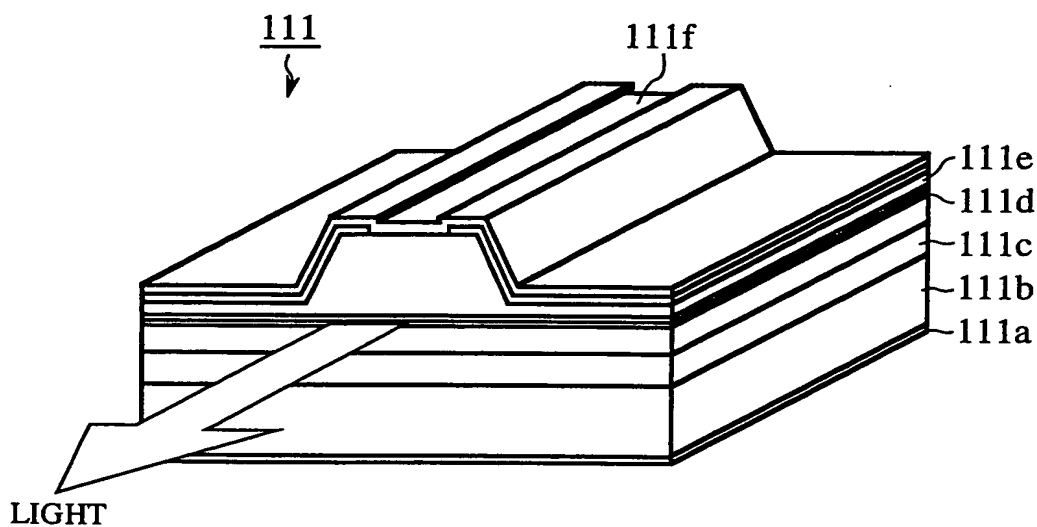
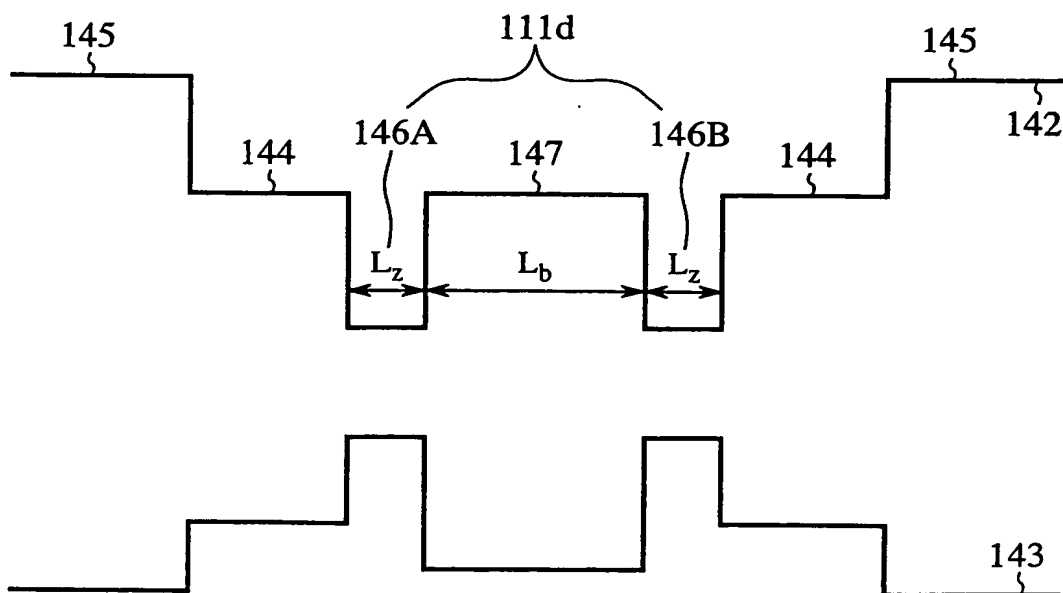


FIG.13 (PRIOR ART)



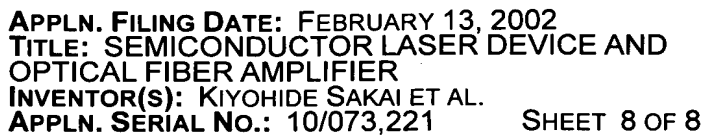


FIG. 14

SEMICONDUCTOR LASER DEVICE

10

14

15

16

15A

15B

17

20

30

OPTICAL COUPLER  
(PUMPING  
LIGHT-SIGNAL  
LIGHT COUPLING UNIT)

50

51

52

EDF (RARE-EARTH  
DOPED OPTICAL  
FIBER)

SIGNAL LIGHT